

**Rh Negative Blood Type in Pregnancy**

**What is Rh factor?**

Blood type is classified as A, B, AB, or O, and is either Rh-negative or Rh-positive. Rh factor is a type of protein found on red blood cells. Blood that is Rh-positive has this protein, whereas blood that is Rh-negative does not.

**Why does Rh matter?**

Rh-positive and Rh-negative blood types are incompatible. When Rh-positive blood is introduced into the bloodstream of a person with Rh-negative blood, the immune system will produce permanent anti-Rh antibodies and “attack” the Rh-positive red blood cells. This is an irreversible—but preventable—process called sensitization.

**When am I at risk for sensitization?**

For Rh-negative pregnant women, sensitization can occur anytime she is carrying an Rh-positive baby and her baby’s blood mixes with her own. This may happen during a miscarriage or abortion, ectopic pregnancy, in-utero procedures (i.e. amniocentesis), abdominal trauma, maternal hemorrhage, external cephalic version, or childbirth. The risk of sensitization increases as the fetal blood volume increases (i.e. as the baby grows); it is highest during the delivery of the placenta. A simple blood test at the beginning of prenatal care is done to see if you have already made any antibodies that may harm your unborn baby.

**What are the odds I am carrying an Rh-positive baby?**

If the father/donor is also Rh-negative, there is no chance of having an Rh-positive baby. However, with an Rh-positive father/donor, the chance of having an Rh-positive baby is 50- 100%.

**What is the risk to my current baby? How about future babies?**

Once the antibodies to Rh factor are present in an Rh-negative pregnant woman’s blood, they can cross the placenta and cause hemolytic disease of the newborn (HDN). HDN can cause life-threatening anemia, edema (hydrops fetalis), brain damage, and death. However, HDN does not generally happen in the first pregnancy because the first antibodies produced from sensitization are too large to cross the placenta. The risk of HDN is to future pregnancies, when smaller antibodies are produced and able to cross the placenta to destroy fetal red blood cells.

**How can sensitization and HDN be prevented?**

Because of the risk of sensitization, it is the standard of care for Rh-negative pregnant women to receive an injection of RhoGAM during pregnancy at approximately 28 weeks, after the birth of a Rh-positive baby, and in a case where baby’s blood may get into the mother’s circulation such as miscarriage or bleeding in pregnancy. RhoGAM is a highly purified concentrate of anti-Rh antibodies made from the Rh-negative blood of persons who have been sensitized. RhoGAM acts to temporarily “cloak” or “shield” any fetal Rhpositive red blood cells in maternal circulation from detection by the pregnant woman’s immune system for 12 weeks, thereby preventing her from making permanent antibodies.

**How does RhoGAM affect my chances of being sensitized?**

* With **NO** RhoGAM given, 16% of Rh-negative mothers carrying a positive baby will become sensitized.
* With RhoGAM given at **28** weeks gestation and then again within **72 hours of delivering** a positive baby, only 0.1% will become sensitized.
* With RhoGAM given **only after delivery**, and NOT at 28 weeks, 2% of women will become sensitized.

**What are the risks and benefits of RhoGAM?** **Are there any alternatives?**

The risks of the RhoGAM shot are pain or irritation at the injection site. The primary benefit of RhoGAM is that it keeps the mother’s body from making antibodies that can attack future baby’s blood cells, thus decreasing the risk of the future baby getting hemolytic disease of the newborn. There are no known alternatives to RhoGAM.



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**Informed Consent**

**Consent:** I have read all of the information provided and have had the opportunity to ask questions. I have been provided resources for further research and education regarding Rh-Negative Blood types, hemolytic disease in the newborn and the RhoGam injection. I understand the benefits and risks of receiving RhoGam as well as refusing it. I will in no way hold Growing Families liable for my decision. I am fully aware of the risks and benefits and have freely chosen to take the following action:

**Initial** next to your decision(s):

\_\_\_\_\_\_\_ I consent to prophylactic antepartum RhoGAM, as well as postpartum RhoGAM if my baby is Rh positive.

\_\_\_\_\_\_\_ I refuse antepartum RhoGAM, but consent to postpartum RhoGAM if my baby is Rh positive.

\_\_\_\_\_\_\_ I refuse all RhoGAM administration.

Date of Consent:\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_

Clients Printed Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Clients Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Midwife’s Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_